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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,597	06/18/2001	Paul E. McKenney	BEA920010011US1	3364
25253	7590	10/02/2003	EXAMINER	
IBM CORPORATION IP LAW DEPT, ED02-905 15450 SW KOLL PARKWAY BEAVERTON, OR 97006-6063			ZHEN, WEI Y	
			ART UNIT	PAPER NUMBER
			2122	

DATE MAILED: 10/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/884,597

Applicant(s)

MCKENNEY, PAUL E.

Examiner

Wei Y Zhen

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 1,2,8-11,16,18-23 and 25 is/are rejected.
- 7) ☒ Claim(s) 3-7,12-15,17,24 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### DETAILED ACTION

1. Claims 1-28 are pending.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 10-11, 16, 21, 23, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Temma et al, U.S. Patent No. 5,796,996.

As per claim 1, Temma et al discloses

Forcing each CPU to execute a memory barrier instruction (col. 3 lines 19-21, “execution of the CPU instruction by the forced ejection of the output buffer...”);

Having each CPU send an indicator communicating completion of said memory barrier instruction (col. 4 lines 2-5, “...completion of the ejection is notified...”).

As per claim 2, Temma et al discloses

Forcing each CPU to execute a memory barrier instruction includes sending an interprocessor interrupt to all CPUs (col. 3 line 14, “CPU is set to the interruption masking state”).

Claim 10 is rejected for the reason set forth in the rejection of claim 1.

Claim 11 is rejected for the reason set forth in the rejection of claim 2.

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As per claim 16, Temma et al discloses

Wherein the instruction manager includes a tool for each CPU to register completion of said memory barrier instructions (col. 4 lines 2-5, "...completion of the ejection is notified...").

Claim 21 is rejected for the reason set forth in the rejection of claim 1.

Claim 23 is rejected for the reason set forth in the rejection of claim 2.

Claim 25 is rejected for the reason set forth in the rejection of claim 7.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9, 18-20, 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Temma et al, U.S. Patent No. 5,796,996.

As per claims 8 and 9, Temma et al does not explicitly disclose providing array for CPU to register memory barrier request, scanning array to determine execution of memory barrier instruction as claimed. Official Notice is taken that using array to register memory request were well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well known knowledge

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into the teaching of Temma et al to use array to register memory request because one would want to utilize array to store and organize data to facilitates the retrieval of data from array.

Claims 18-20 correspond to claim 8-9 and are rejected for the reasons et forth in the rejections of claims 8-9.

As per claim 22, Temma et al does not explicitly disclose wherein the medium is selected from the group consisting of: a recordable data storage medium, and a modulated carrier signal. Official Notice is taken that a recordable data storage medium, and a modulated carrier signal were well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate the teaching of the well known knowledge into the teaching of Temma et al to have the medium be selected from the group consisting of: a recordable data storage medium, and a modulated carrier signal because one would want to utilize various types of medium to meet the needs of various types of systems.

***Allowable Subject Matter***

4. Claims 27-28 are allowed.
5. Claims 3-7, 12-15, 17, 24, 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

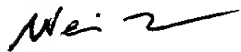
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*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei Y Zhen whose telephone number is (703) 305-0437. The examiner can normally be reached on Monday-Friday, 8 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.



Wei Zhen  
September 25, 2003